

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8742

Exam Date: 10-19-1994

1. Current Owner: LARRY R GILLETTE
1961 S 1800 E
GOODING ID 83330-5209
(208)934-4555

And

CINDY L GILLETTE
1961 S 1800 E
GOODING ID 83330
(208)934-4555

2. Accompanied by: Dan Forsythe
Phone No:
Address:
Relationship to Permit Holder: Farm operator for previous owner

3. **SOURCE** **TRIBUTARY**
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-2660, 2697, 2729
2. Other water rights with the same point of diversion: 37-2660, 2697, 2729, 2761A

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER GOODING County	SE1/4SE1/4NE1/4	Sec. 12, Twp 06S, Rge 14E, B.M.
GROUND WATER GOODING County	SW1/4NE1/4SE1/4	Sec. 12, Twp 06S, Rge 14E, B.M.
GROUND WATER GOODING County	SE1/4NW1/4NW1/4	Sec. 13, Twp 06S, Rge 14E, B.M.
GROUND WATER GOODING County	SW1/4NW1/4SE1/4	Sec. 14, Twp 06S, Rge 14E, B.M.

Method of Determination: ArcView 2002 Spot Photo

2.

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
06S 14E 11													26.0		40.0	40.0	106.0
06S 14E 12	25.0	30.0	40.0	40.0	3.7			16.0	38.0	35.0	39.0	32.0	40.0	40.0	40.0	38.0	456.7
06S 14E 13	25.0	33.0	2.0		37.0	34.0	38.0	36.0		2.8							207.8
06S 14E 14	40.0	40.0	40.0	40.0									36.0	29.0			225.0

Total Acres: 995.5

Method of Determination:

3. ☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
1	US Motors	125	R-9982-01-171	Layne&Bowler	D10202
2	"	250	1220340	"	27545
3	GE	400	DAJ421005	"	D9542
4					

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>

2. Measurements:

The only complete set of measurements occurred in 1998, when 16.94 cfs was measured by the North Snake GW District. See Narrative below.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 102.5 \text{ new acres} \times 4.0 \text{ afa/ac} = 410.0 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 2054.2 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 410.0$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

This recommendation is a combination of what I found during the original exam and what has happened since then. There were 4 wells in this system during the original exam, and there are still 4 wells in the system. The wells operated independently in 3 systems during my exam, but have since been tied together in a single system. I am recommending that the license be issued for the wells in their present locations in order to cover this farm for the upcoming irrigation season; once the license is issued, Gillette will file a transfer to bring all his rights up par. The Sec. 14 well is also the decreed pod for Right 37-2761A, which is owned by the City of Gooding but leased by Mr. Gillette; according to him, the other wells will not be used to provide water for this land (the original pod for this land was in Sec. 10, but was moved to Sec. 14 in 1996 by approved transfer).

With regard to the place of use, my recommendation includes most of the pivot corners that had been irrigated within a reasonable time frame of 1994. Most corners are no longer irrigated due to water-supply problems, but the right to irrigate them appears to still be valid. The SRBA decrees cover 893 acres, but I found 995.5 acres irrigated as of 1994. I am recommending the license be issued as a ppu with no annual acreage limit. The ppu is somewhat different than what was decreed due to both the additional acres and changes that have occurred in the place of use since 1987.

With regard to the diversion rate, the permit was issued to both add acres and to increase the diversion rate for the existing acres. The north well in Sec. 12 (Well #1) was drilled in 1965 for Rt. 37-2697; a flow rate of 3.25 cfs has been decreed. The south well in Sec. 12 (Well #2) was apparently drilled in 1960 under Rt. 37-2660, and has a decreed rate of 4.36 cfs. The south well in the NW/NW Sec. 13 (Well #3) was drilled in 1965 under 37-2729, and has a decreed rate of 4.40 cfs. The total decreed rate from these 3 wells is 12.01 cfs, which could not be forfeited from claim filing to the decree issuance in December of 2002.

A 4th well was drilled in the SE/SE Sec. 11 in 1980, and added as a pod to all 3 rights by transfer in April of 1987 (applied for in December 1986 & approved in April 1987). A fifth well was drilled in March of 1987; the well log shows it to be in the NW/NE Sec. 14, but I think that it was actually drilled in the NW corner of Sec. 13. The 4th well that I found during my 1994 visit was clearly in Sec. 13, as it fed into a pond that shows up clearly in ArcView. Gillette bought the property around 1996, and had a 6th well drilled in Sec. 14 in 1997 to replace the 5th well in Sec. 13; the Sec. 14 well is now the 4th well in the system, as the 5th & 6th wells are not in use (they went dry). Well #4 in Sec. 13 had a 500 hp motor pumping into a pond, with two 75 hp booster motors to pressurize the water for sprinklers; I estimated the boosters to pump 4.21 cfs. The replacement Well #4 in Sec. 14 has a 400 hp motor & pump feeding directly into a pressurized mainline; this well is much lower in elevation than the well that it replaced, and the water is not as deep, so less horsepower is needed to produce the same diversion rate. I am recommending a diversion rate of 4.21 cfs for the proposed license.

The system was not measured for diversion rates during my exam because the wells were all off for the harvest. The best I could do was to estimate the diversion rates. Due to system changes, Well #1 was estimated to pump less than what was licensed/decreed. Wells 2 & 3 appeared to pump their licensed/decreed rates. But since forfeiture is not an issue with these 3 wells, they are still entitled to the full rate of 12.01 cfs. The previous owner was more of a hustler than a farmer, so did not take proper care of the irrigation system. Gillette is an experienced farmer, and has brought the system back up to good working condition. I had hoped to recommend the 1998 well measurements made by the North Snake GW District to determine total system capacity, but a review by the watermaster (Cindy Yenter) shows that the measurements are so poorly documented as to be unreliable. The 16.94 cfs measured at that time may be high, low, or correct; it is not possible to say which it is due to a lack of proper field notes. Wells #1 & 4 were measured again last year, but both measurements were less than what was found in 1998. Gillette has told me that he is having water-supply problems, which would be expected due to the continuing drought. So I think it would be unfair to rely on the new measurements because of the drought. So the recommended rate of 4.21 cfs will just be in addition to what is already allowed under the 3 existing water rights on this farm., for a total system capacity of 16.22 cfs. The measured system capacity is about 4½% over my recommendation, so is within standard meter accuracy tolerance. The 1998 measurement for Well #4 was 9 gpm less than my recommendation, so at least does not contradict my earlier findings. Moving the City of Gooding right into Well #4 allowed it to pump additional flow, but this apparently did not happen; the City right was only recently decreed, however, so we cannot take away their right to pump the additional flow at this time (forfeiture could be an issue in the future, however). Licensing conditions will mention the City right, but will not put any limitations on it.

The recommended volume is 4.0 afa/acre for the additional land added under this permit, as the existing acres are already decreed for the full standard volume.

Have conditions of permit approval been met? Yes – Above-ground mainlines where polysonic flow

meters can be attached.

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 11/15	4.210 CFS	410.00 AF
<u>Totals:</u>		4.210 CFS	410.00 AF

2. Recommended Amendments

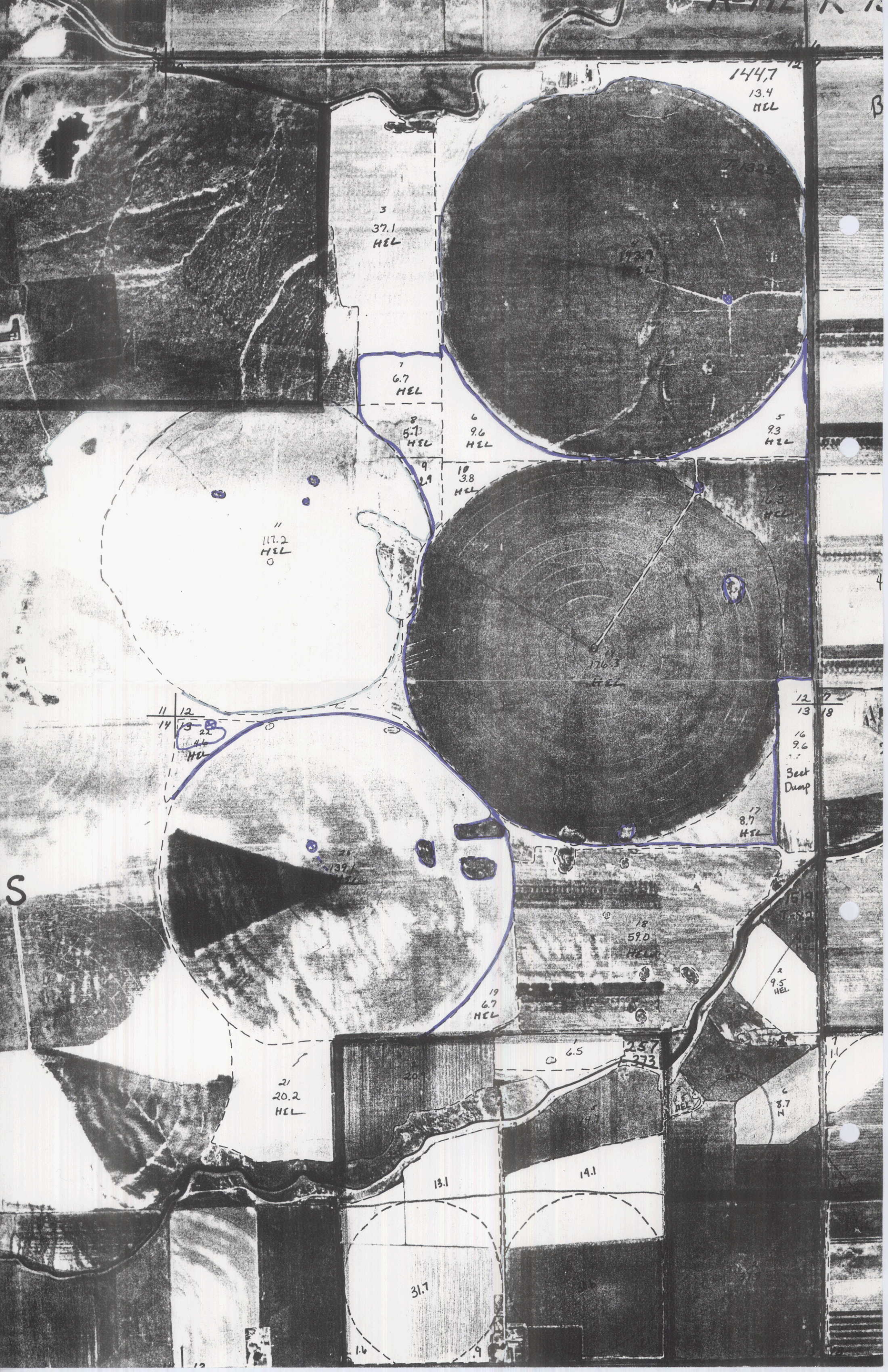
☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

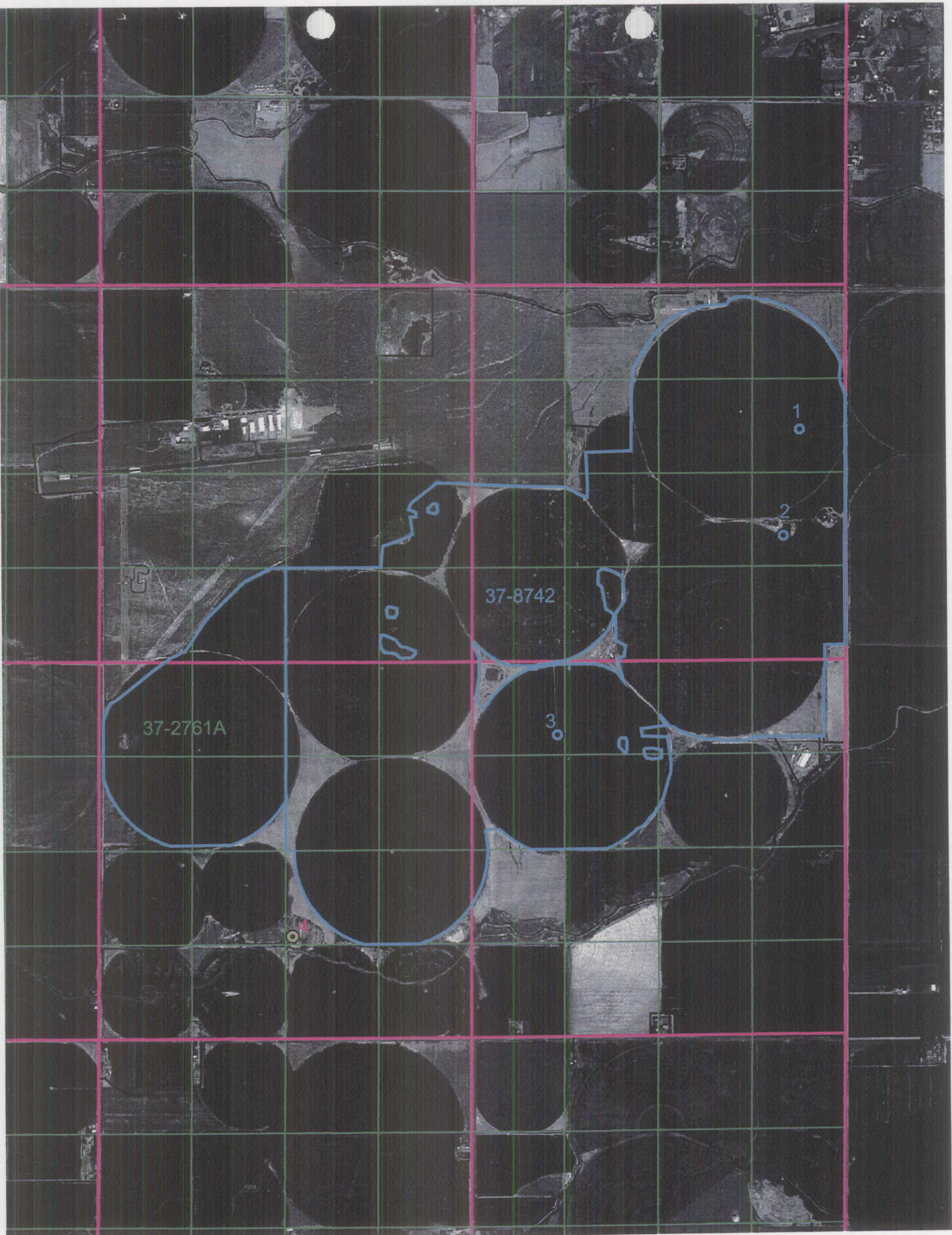
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name J. F. Stanton Date 3-1-2005

Reviewer _____ Date _____





37-2761A

37-8742

1

2

3

4

[illegible]

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS

FILE: 37-8742
 DATE: 12-21-74
 BY: JE Stanton

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (H.P.) \times (EFF.)}{TDH}$

- Q = CFS
- H.P. = Total Brake Horsepower of pumping plant (including booster)
- EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)
- TDH = total dynamic head = [(LIFT) + (PSI X 2.31)]
- LIFT = depth to water in FEET from land surface to pumping water level
- PSI = pumping pressure measured in psi near pump
 (if open discharge assume zero [0])

$$Q = \frac{(8.8) \times (200) \times (0.70)}{[(265) + (90 \times 2.31)]} = 2.61 \text{ cfs}$$

LIFT FROM:	PSI FROM:	NOTES ON PUMP:
measurement ()	measurement ()	Motor Make, Serial or ID
owner ()	owner (X)	
area estimate ()	estimate ()	Pump Make, Serial or ID, rating
well logs (X)	owner gage ()	
	Booster (Y) (N)	

REMARKS PD #1. Originally measured open discharge w/ 1/25 hp motor at 3.25 cfs
Some of this flow is now diverted thru Well #4.

ANNUAL VOLUME ANALYSIS

$$\text{POTENTIAL Acre Feet/Acre/Annum} = \frac{(\text{DAYS IN SEASON}) \times (1.98) \times (Q)}{(\text{RECOMMENDED ACRES IRRIGATED})}$$

(season)	(days)	
3/15 - 11/15	246	
4/1 - 11/1	215	
4/15 - 10/15	184	
3/1 - 12/1	276	

$$\text{POTENTIAL} = \frac{((214) \times (1.98) \times (2.61))}{(177)} = 6.25$$

REQUIRED Acre Feet/Acre/Annum = 4.0
 (AF/Ann/Ac irrigation requirement from chart for area)

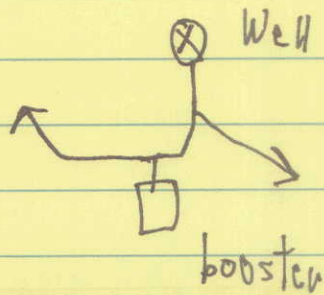
NOTE that this is NOT Consumptive use

IF POTENTIAL IS GREATER THAN REQUIRED THEN NO MEASUREMENT NECESSARY ✓
 IF POTENTIAL IS LESS THAN REQUIRED THEN MEASUREMENT IS NECESSARY

Well SE/NE Sec. 12
PD #1

US Motors 135 hp #R-9982-01-171
Layne & Bowler pump #D10202

booster US Motors 75 hp number illegible
Aurora pump # 84-11925



37-8724
10-19-1994
By JE Stanton

should be 1232 gpm at 90-100 psi
7 gpm/sec

1239 gpm = 2.76 cfs

Well Log Form 1

RECEIVED
JAN 24 1966
DEPARTMENT OF RECLAMATION

WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. 231988 Well No. _____ County Gooding
Owner Ted Edholm
Address Gooding, Idaho
Driller Billy Gally for C. B. Eaton & Sons, Inc.
Address Wendell, Idaho
Well location SE 1/4 NE 1/4 Sec. 12, T. 65 N/S. R. 14E E/W
Size of drilled hole 16"

Locate well in section

NW 1/4	NE 1/4
Sec. _____	
SW 1/4	SE 1/4

Total depth of well 386
Give depth to standing water from the ground 235 Water temp _____ °Fahr.
Test delivery was 1350 g.p.m. or _____ c.f.s. Drawdown was 260 feet. Pump? _____ Ball? _____
Size of pump and motor used to make test 125 H. P. Electric Permanent pump
Length of time of test _____ hours _____ minutes.
If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____
If flowing well, described control works _____
(TYPE AND SIZE OF VALVE, ETC.)
Water will be used for irrigation Weight of casing per lineal foot 52.36
Thickness of casing .312 Casing material steel
(STEEL, CONCRETE, WOOD, ETC.)
Diameter, length and location of casing 265 ft. of 16 O.D. Casing
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
16"	0	265	265	

Number and size of perforations _____ Located _____ feet to _____ feet from ground

Date of commencement of well March 1965 Date of completion of well May 4, 1965

SENE 8.12 65 14E

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS

FILE: 37-8742
 DATE: 12-21-74
 BY: JE Stanton

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (H.P.) \times (EFF.)}{TDH}$

Q = CFS
 H.P. = Total Brake Horsepower of pumping plant (including booster)
 EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)
 TDH = total dynamic head = [(LIFT) + (PSI X 2.31)]
 LIFT = depth to water in FEET from land surface to pumping water level
 PSI = pumping pressure measured in psi near pump
 (if open discharge assume zero [0])

$$Q = \frac{(8.8) \times (250) \times (0.70)}{[(301) + (5 \times 2.31)]} = 4.93 \text{ cfs}$$

LIFT FROM:	PSI FROM:	NOTES ON PUMP:
measurement ()	measurement ()	Motor Make, Serial or ID
owner ()	owner ()	
area estimate ()	estimate (X)	Pump Make, Serial or ID, rating
well logs (X)	owner gage ()	
	Booster (Y) (N)	

REMARKS Well #2. flow calculated under open discharge using main motor only.
Previously measured open discharge with 200 hp motor at 4.36 cfs.
Farm operator believes well is not exceeding 2000 gpm (4.46 cfs) based
on system operation. PWL has gone down in this area, so actual pumping

ANNUAL VOLUME ANALYSIS rate probably has not changed much. Allow licensed flow rate

$$\text{POTENTIAL Acre Feet/Acre/Annum} = \frac{(\text{DAYS IN SEASON}) \times (1.98) \times (Q)}{(\text{RECOMMENDED ACRES IRRIGATED})}$$

(season)	(days)	
3/15 - 11/15	246	
4/1 - 11/1	215	
4/15 - 10/15	184	
3/1 - 12/1	276	

POTENTIAL = $(214) \times (1.98) \times (4.36) = 245$

$$\text{POTENTIAL} = \frac{7.5}{4.0}$$

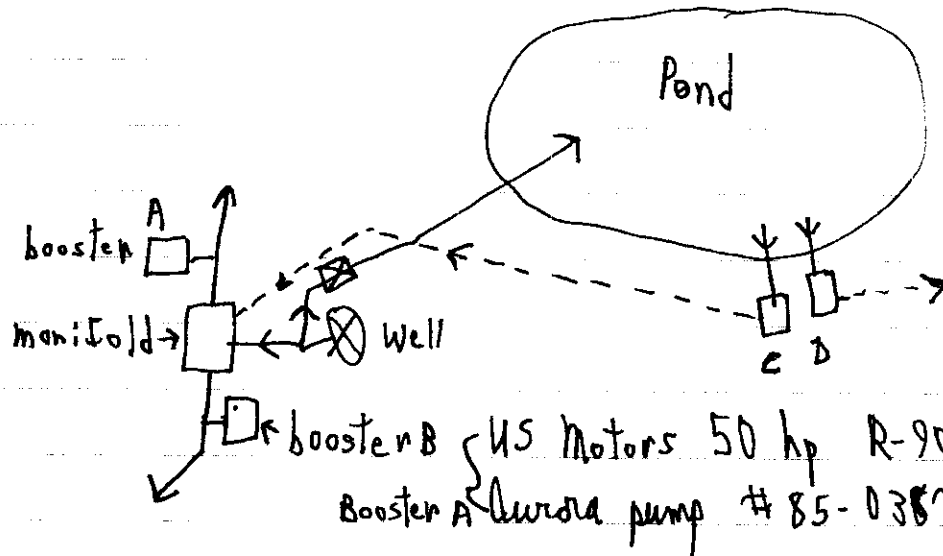
REQUIRED Acre Feet/Acre/Annum =
 (AF/Ann/Ac irrigation requirement from chart for area)

NOTE that this is NOT Consumptive use

IF POTENTIAL IS GREATER THAN REQUIRED THEN NO MEASUREMENT NECESSARY ✓
 IF POTENTIAL IS LESS THAN REQUIRED THEN MEASUREMENT IS NECESSARY

PD NE/SE Sec. 1/2

US Motors 250 hp #1220340
Layne & Bowler pump #27545
2250 gpm at 300' head



booster B US Motors 50 hp R-9009-04-167
Booster A Aurora pump #85-03872

Booster B US Motors 50 hp R-9416-04-842
Aurora Pump #~~85~~-
85-03874

Booster C Baldor Motor 30 hp #293C-660
Cornell pump #84401

Booster D Baldor Motor 30 hp #294C-097
Cornell pump #84402

should be 1800-2000 gpm
95-100 psi
1 gpm/ac

1715 gpm = 3.82 cfs

RECEIVED
MAY 23 1967

REPORT OF WELL DRILLER
State of Idaho

Department of Reclamation,

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:

Name
Address

Owner's Permit No.
NATURE OF WORK (check): Replacement well ☐
New well ☐ Deepened ☐ Abandoned ☐

Water is to be used for:

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other ☐ (explain)

CASING SCHEDULE: Threaded ☐ Welded ☐
"Diam. from ft. to ft.
"Diam. from ft. to ft.
"Diam. from ft. to ft.
"Diam. from ft. to ft.
Thickness of casing: Material:
Steel ☐ concrete ☐ wood ☐ other ☐

(explain)
PERFORATED? Yes ☐ No ☐ Type of
perforator used:

Size of perforations: " by "
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

WAS SCREEN INSTALLED? Yes ☐ No ☐

Manufacturer's name Model No.
Type
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

CONSTRUCTION: Well gravel packed? Yes ☐
No. ☐ size of gravel Gravel
placed from ft. to ft. Surface seal
provided? Yes ☐ No ☐ To what depth?
 ft. Material used in seal:

Did any strata contain unusable water? Yes ☐
No. ☐ Type of water:
Depth of strata ft. Method of sealing
strata off:

Surface casing used? Yes ☐ No. ☐
Cemented in place? Yes ☐ No ☐

Locate well in section

LOCATION OF WELL: County
SE NE Sec. 12 T. N/S R. E/W
NE

Size of drilled hole: 20" Total
depth of well: 420' Standing water
level below ground: 301' Temp.
Fahr. * Test delivery: 2250 gpm
or cfs Pump? ☒ Bail ☐
Size of pump and motor used to make test:

Length of time of test: Hrs. Min.
Drawdown: ft. Artesian pressure: ft.
above land surface Give flow cfs
or gpm. Shutoff pressure:
Controlled by: Valve ☐ Cap ☐ Plug ☐
No control ☐ Does well leak around casing?
Yes ☐ No ☐

DEPTH		MATERIAL	WATER
FROM	TO		YES OR NO
FEET FEET			

Work started:
Work finished: August 1966
Well Driller's Statement: This well was
drilled under my supervision and this report
is true to the best of my knowledge.
Name: Carl Wilson
Address:
Signed by Carl Wilson
License No. Date: May 18, 1967

USGS

Use other side for additional remarks



Pond 9 Pump Outlets
NE/SE Sec. 12

Re-lift Pumps from Pond

37-8742
10-19-1994
By J E Stanton



P/D NE/SE S. 12

Boosters at Well

Well, Mainline
to Pond



37-8742
10-19-1994
By JE Stanton

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS

FILE: 37-8742
DATE: 12-21-74
BY: J E Stanton

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (\text{H.P.}) \times (\text{EFF.})}{\text{TDH}}$

Q = CFS
H.P. = Total Brake Horsepower of pumping plant (including booster)
EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)
TDH = total dynamic head = [(LIFT) + (PSI X 2.31)]
LIFT = depth to water in FEET from land surface to pumping water level
PSI = pumping pressure measured in psi near pump (if open discharge assume zero [0])

$$Q = \frac{(8.8) (\dots 480 \dots) (0.70)}{[(\dots 484 \dots) + (\dots 90 \dots \times 2.31)]} = \frac{4.27}{\cancel{2.56} \text{ cfs}}$$

LIFT FROM:	PSI FROM:	NOTES ON PUMP:
measurement ()	measurement ()	Motor Make, Serial or ID
owner ()	owner (X)	
area estimate ()	estimate ()	Pump Make, Serial or ID, rating
well logs (X)	owner gage ()	
Booster (Y) (N)		

REMARKS Well #3, - Well is licensed at 4.4 cfs based on gctag/ measurement.
Allow that amount.

ANNUAL VOLUME ANALYSIS

POTENTIAL Acre Feet/Acre/Annum = $\frac{(\text{DAYS IN SEASON}) \times (1.98) \times (Q)}{(\text{RECOMMENDED ACRES IRRIGATED})}$

(season)	(days)	
3/15 - 11/15	246	
4/1 - 11/1	215	
4/15 - 10/15	184	
3/1 - 12/1	276	

POTENTIAL = $\frac{(214.478) \times (1.98) \times (\dots 4.4 \dots)}{(\dots 298 \dots)}$

POTENTIAL = 6.3

REQUIRED Acre Feet/Acre/Annum = 4.0
(AF/Ann/Ac irrigation requirement from chart for area)
NOTE that this is NOT Consumptive use

IF POTENTIAL IS GREATER THAN REQUIRED THEN NO MEASUREMENT NECESSARY ✓
IF POTENTIAL IS LESS THAN REQUIRED THEN MEASUREMENT IS NECESSARY ()

RECEIVED
MAY 17 1967

WELL LOG AND REPORT TO THE Department of Reclamation
STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. _____ Well No. _____ County Gooding

Owner Ernest Fields

Address Gooding, Idaho

Driller Leon Nielson for C. B. Eaton & Sons, Inc.

Address Wendell, Idaho

Well location NW NW 13 65 N/S 14E E/W

Size of drilled hole 20"

Total depth of well 5.20

Give depth to standing water from the ground 144° Water temp. _____ °Fahr.

Test delivery was 2:50 p.m. or _____ c.f.s. Drawdown was 4.5 feet. Pump? X Bail? _____

Size of pump and motor used to make test 300 hp diesel engine

Length of time of test 4 hrs hours 0 minutes.

If flowing well, give flow 1000 c.f.s. or 100 g.p.m. and of shut off pressure 100 p.s.i.

If flowing well, described control works.

(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for irrigation Weight of casing per lineal foot 88.52.73 per ft

Thickness of casing 250; Casing material Steel
(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing. 20" 9-D. (STEEL, CONCRETE, WOOD, ETC.)
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER.)

Diameter, length and location of casing — 208-640

CASING 12" IN DI
CASING OVER 12"

JOB I
JOB II
JOB III
JOB IV
JOB V

DMU TRAS
DMU TRAS
DMU TRAS
DMU TRAS
DMU TRAS

CASING RECORD

Diagn. Casing	From Feet	To Feet	Length Feet	Remarks—seals, grouting, etc.
20	0	91	91	

Number and size of perforations 0 located feet to feet from ground

Date of commencement of well Jan 2, 1965 Date of completion of well Mar 7, 1965

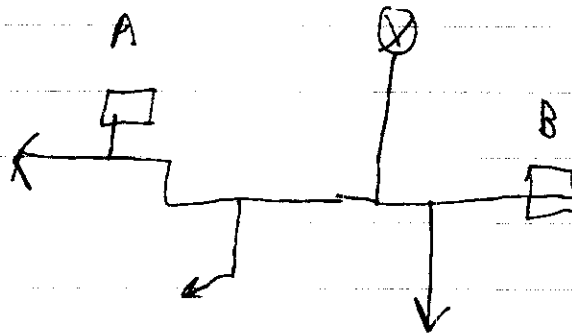
NW NW 5.13 6S/4E

3
Well #3 near center NW 1/4 S. 13 SE/NW/NW

GE 400 hp motor #DAJ421005
Layne & Bowler D9542

A - Baldor motor 30 hp JPM25351
Aurora pump 3X50559

B - Baldor pump 50 hp JPM25431
Aurora pump 3X50560



$$1 \text{ gpm/sec} = 2000 \text{ gpm}$$

$$2086 \text{ gpm} = 4.65 \text{ cfs}$$

600,000

37-8742



Well #3

37-8742
10-19-1994
By JE Stanton

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS *****

FILE: 37-8742
DATE: 12-21-94
BY: JE Stanton

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (\text{H.P.}) \times (\text{EFF.})}{\text{T.D.H.}}$

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EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)
T.D.H. = total dynamic head = [(LIFT) + (PSI X 2.31)]
LIFT = depth to water in FEET from land surface to pumping water level
PSI = pumping pressure measured in psi near pump
(if open discharge assume zero [0])

$$Q = \frac{(8.8) \times (500) \times (0.70)}{[(492) + (0 \times 2.31)]} = 6.26 \text{ cfs}$$

LIFT FROM:	PSI FROM:	NOTES ON PUMP:
measurement ()	measurement ()	Motor Make, Serial or ID
owner ()	owner ()	
area estimate ()	estimate ()	Pump Make, Serial or ID, rating
well logs (X)	owner gage ()	

REMARKS Well #4 Figured open discharge without re-lift pumps.
At 95 psi, booster-pump capacity is 4.21 cfs. Well is operated to keep
the pond level constant with both boosters on, so the well should pump
at the same rate as the boosters.

ANNUAL VOLUME ANALYSIS

$$\text{POTENTIAL Acre Feet/Acre/Annum} = \frac{(\text{DAYS IN SEASON}) \times (1.98) \times (Q)}{(\text{RECOMMENDED ACRES IRRIGATED})}$$

(season)	(days)	
3/15 - 11/15	246	
4/1 - 11/1	215	
4/15 - 10/15	184	
3/1 - 12/1	276	

POTENTIAL = $\frac{(\dots 214 \dots) \times (1.98) \times (\dots 4.21 \dots)}{(\dots 278 \dots)}$

$$\text{POTENTIAL} = \frac{6.4}{4.0}$$

REQUIRED Acre Feet/Acre/Annum = 4.0
(AF/Ann/Ac irrigation requirement from chart for area)

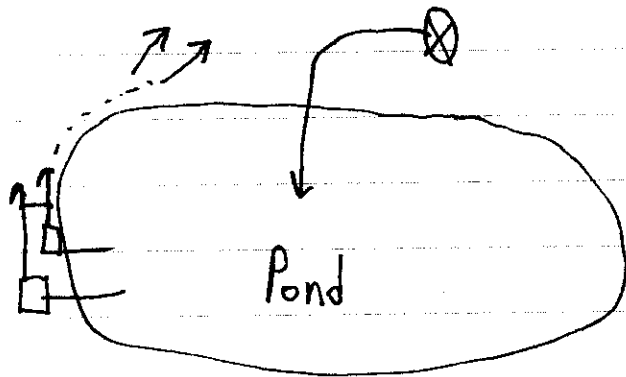
NOTE that this is NOT Consumptive use

IF POTENTIAL IS GREATER THAN REQUIRED THEN NO MEASUREMENT NECESSARY ✓
IF POTENTIAL IS LESS THAN REQUIRED THEN MEASUREMENT IS NECESSARY ()

NW/
Well NW/NW Sec. 13

Well #4 in 1994

GE 500 hp motor #BLJ212020
Layne & Butler pump #V75-71217
2400 gpm at 705' head



Baldor 75 hp booster motor #494C-709
Cornell Pump #84236 15.00

Baldor 75 hp booster motor #494C-708
Cornell pump #84237 15.00

2000 gpm at 7 gpm/ac

1946 gpm = 4.34 cfs

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

USE TYPEWRITER OR
BALLPOINT PEN

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER John Brooks Gooding, Idaho	7. WATER LEVEL Static water level 492 feet below land surface. Flooding? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ OF Quality _____																																																																																																																																																																
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☐ Bailer ☐ Air ☐ Other _____ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																																																																													
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3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr><td>22</td><td>0</td><td>3</td><td>Top Soil</td><td></td><td>X</td></tr> <tr><td>3</td><td>14</td><td>14</td><td>Consolidated sand & clay</td><td></td><td></td></tr> <tr><td>14</td><td>33</td><td>33</td><td>Blk Basalt, boulders, loose</td><td></td><td></td></tr> <tr><td>33</td><td>128</td><td>128</td><td>red " "</td><td></td><td></td></tr> <tr><td>128</td><td>130</td><td>130</td><td>Hard gray basalt</td><td></td><td></td></tr> <tr><td>130</td><td>135</td><td>135</td><td>soft black basalt</td><td></td><td></td></tr> <tr><td>135</td><td>175</td><td>175</td><td>Red basalt w/ streaks of hard it</td><td></td><td></td></tr> <tr><td>175</td><td>170</td><td>170</td><td>Rhyolite (slipping beds)</td><td></td><td></td></tr> <tr><td>170</td><td>201</td><td>201</td><td>Hard red basalt</td><td></td><td></td></tr> <tr><td>201</td><td>211</td><td>211</td><td>Hard black basalt</td><td></td><td></td></tr> <tr><td>211</td><td>260</td><td>260</td><td>Black basalt</td><td></td><td></td></tr> <tr><td>260</td><td>265</td><td>265</td><td>Soft black basalt</td><td></td><td></td></tr> <tr><td>265</td><td>275</td><td>275</td><td>Black basalt</td><td></td><td></td></tr> <tr><td>275</td><td>298</td><td>298</td><td>Soft black basalt</td><td></td><td></td></tr> <tr><td>298</td><td>308</td><td>308</td><td>Brown rhyolite</td><td></td><td></td></tr> <tr><td>308</td><td>335</td><td>335</td><td>Red basalt</td><td></td><td></td></tr> <tr><td>335</td><td>350</td><td>350</td><td>Hard basalt</td><td></td><td></td></tr> <tr><td>350</td><td>375</td><td>375</td><td>Red basalt</td><td></td><td></td></tr> <tr><td>375</td><td>420</td><td>420</td><td>Loose rock & cinders</td><td></td><td></td></tr> <tr><td>420</td><td>472</td><td>472</td><td>Hard basalt</td><td></td><td></td></tr> <tr><td>472</td><td>482</td><td>482</td><td>Soft basalt</td><td></td><td></td></tr> <tr><td>482</td><td>505</td><td>505</td><td>Hard basalt</td><td></td><td></td></tr> <tr><td>505</td><td>507</td><td>507</td><td>Sand</td><td>X</td><td></td></tr> <tr><td>507</td><td>528</td><td>528</td><td>Hard basalt</td><td></td><td>X</td></tr> <tr><td>528</td><td>540</td><td>540</td><td>Cinders & loose rock</td><td>X</td><td></td></tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	22	0	3	Top Soil		X	3	14	14	Consolidated sand & clay			14	33	33	Blk Basalt, boulders, loose			33	128	128	red " "			128	130	130	Hard gray basalt			130	135	135	soft black basalt			135	175	175	Red basalt w/ streaks of hard it			175	170	170	Rhyolite (slipping beds)			170	201	201	Hard red basalt			201	211	211	Hard black basalt			211	260	260	Black basalt			260	265	265	Soft black basalt			265	275	275	Black basalt			275	298	298	Soft black basalt			298	308	308	Brown rhyolite			308	335	335	Red basalt			335	350	350	Hard basalt			350	375	375	Red basalt			375	420	420	Loose rock & cinders			420	472	472	Hard basalt			472	482	482	Soft basalt			482	505	505	Hard basalt			505	507	507	Sand	X		507	528	528	Hard basalt		X	528	540	540	Cinders & loose rock	X	
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4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____	10. Work started 10/10/78 Finished 8/18/80																																																																																																																																																																
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ Thickest Diameter From To 0.250 inches 20 inches + 2 feet 94 feet inches inches feet feet inches inches feet feet inches inches feet feet Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation inches by inches Number From To perforations feet feet perforations feet feet perforations feet feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter Slot size Set from feet to feet Diameter Slot size Set from feet to feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from feet to feet Surface seal depth 94' Material used in seal: ☐ Cement grout ☒ Puddling clay ☒ Well cuttings Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent ☐ Cemented between strata Describe access port hole in casing	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name Camas Well Drillers Firm No. 275 Address Corral Date Aug 29, 80 Signed by (Firm Official) C. Lee Benson and (Operator) James H. Benson																																																																																																																																																																
6. LOCATION OF WELL Sketch map location must agree with written location. N W E S County Gooding SE 1/4 Sec 11 T. 6 N. R. 14 E. W.	7. Subdivision Name _____ Lot No. _____ Block No. _____																																																																																																																																																																



NW/140 S.13 P/D

Mainline to Pond

Re-lift Pumps
From Pond
to Sprinklers

